

**Work Order ID 125256**

Tuesday, October 07, 2014 10:39:20 AM

**\*125256\***

Page 1

**Item ID:** D3391-023

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

**Revision ID:**

**Item Name:** Mid Tube Assembly

Stop

**\*NS2\***

**Start Date:** 9/25/14    **Start Qty:** 1.00

**\*1\***

**Cust Item ID:**

**Required Date:** 10/06/14    **Req'd Qty:** 1.00

**\*1\***

**Customer:**

**Reference:**

**Approvals:**

**Process Plan:** M-5

**Date:** 14-10-08

**Tooling:**

**Date:**

Run Start

**\*NR1\***

**QC:**

**Date:**

**SPC (Y/N):**

**Date:**

Stop

**\*NR2\***

<b>Sequence ID/ Work Center ID</b>	<b>Operation Description</b>	<b>Set Up/ Run Hours</b>	<b>Tool ID</b>	<b>Tool #</b>	<b>Plan Code</b>	<b>Accept Qty</b>	<b>Reject Qty</b>	<b>Reject Number</b>	<b>Insp. Stamp</b>
<b>Draw Nbr</b>	<b>Revision Nbr</b>								
D3391	I								

100

**\*100\***

Skidtubes

Skidtubes

**Memo**

0.00

0.00

1-Cut tube to finish length as per Dwg D3391

2-Drill pilot holes using DT8796 (Do not drill "B" holes) and drill only 1 fwd saddle hole on one side only as per Dwg D3391

3-Open saddles and GHW holes to Ø0.4375" except for fwd saddle hole of detail "J"

4-Remove .030" from Fwd indexing Ridge as per Dwg D3391

5-Remove indexing ridge on Fwd & Aft end of skidtube as per Dwg D3391

6-Deburr

7-Locate D3391-021 in D3391-023 at 9.00" (see view z-z)

8-Transfer drill one fwd saddle hole only to .188" dia, transfer drill all remaining fwd saddle holes using DT 8149 locating from previously drilled .188" dia hole, using t-pins and clicos to ensure perfect alignment, open up previously transferred pilot holes in D3391-023/-021 using drill press.

ON FIRST SIDE ONLY drill out 2nd and forth fwd saddles holes to 0.500" as per

ON 2ND SIDE ONLY ream out 2nd and forth saddle hole to 0.499".

D3391-021 BATCH: 123416

8E14-10-09

14-10-15

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Date:

## **WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

## Work Order update only



Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
Part No. _____			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
NCR No. _____			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
Suspected Unapproved <input type="checkbox"/>			Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>						
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Design											
Doc/Data											
Equip/Tooling											
Handling/Pre											
Material											
Operator											
Offset/Setup											
Process											
Supplier											
Training											
Transport											
Unapproved											
FAULT CATEGORY											
Landing Gear			General								
<input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function								
			<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence								
			<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge								
			<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled								
			<input type="checkbox"/> Other								

Work Order ID 125256

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\*125256\*

Page 2

Item ID: D3391-023

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Mid Tube Assembly

Stop

\*NS2\*

Start Date: 9/25/14 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 10/06/14 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

9- Drill #30 pilot holes using wearplate Jig DT8217 Identify Ø0.250" holes with paint marker,  
\*\*\*DO NOT DRILL HOLES #3-19-20 FROM FWD END OF JIG  
Open wearplate holes of D3391-023 assembly detail section G-G to Ø0.250" (10 holes) as per Dwg D3391  
Open wearplate holes of D3391-023 assembly detail section H-H to Ø0.297" (20 holes) as per Dwg D3391  
\*\*\*DO NOT OPEN 2 MOST FWD WEARPLATE HOLES\*\*\*  
Deburr and blow out all chips from inside tube, scribe batch # in D3391-023 at aft end.

10- Locating from two fwd wearplate holes in D3391-023 drill remaining 6 wearplate holes in D3391-021 using DT8937

11- Open 10 wearplate holes in D3391-021 to 0.297" dia.

110

QC5- Inspect part completeness to step on W/O

0.00

\*110\*

QC

Quality Control

Memo

0.00

DAS

38

9-89

14-10-22

1

DOA:

*[Signature]*

Date: 14/12/08

## **WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed:

Date: 14/12/4

DART  
AEROSPACE

## Work Order update only

Work Order: <u>125256</u>	DISPOSITION	AGAINST DEPARTMENT/PROCESS					
Part No. <u>D3391-023</u>	Rework <input type="checkbox"/>	Skid-tube <input checked="" type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
NCR No. <u>14-4338</u>	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>		
	Use-as-is <input checked="" type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>		
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>			

## **FAULT CATEGORY**

Landing Gear	General			
Bending	Bend	Folio/Program	Outside Dimensions	Pressure/Forced
Centre Not Concentric	BOM/Route	Grain	Over/Under tolerance	Set-up
Cracks	Broken/Damage/Defect	Hardware	Part Incorrect	Temperature/Cure
Crimp/Kink/Ripple/Wave	Burrs	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld
Cuffs	Contamination	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled
Crushing	Countersink	Misaligned/off center	Positioned Wrong	
Heat Treat	Cut Too Short	Mislabeled	Power Loss/Surge	
Inspection Strip in Tube	Drawing	Misread		<input checked="" type="checkbox"/> Other
Marks/Chatter	Drill Holes	Off-set		
Turning Sequence	Finish	Out of Calibration		
Wave/Twist in Tube	Fit/Function	Out of Sequence		

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**\*125256\***

Page 3

**Item ID:** D3391-023

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

**Revision ID:**

**Item Name:** Mid Tube Assembly

Stop

**\*NS2\***

**Start Date:** 9/25/14    **Start Qty:** 1.00

**\*1\***

**Cust Item ID:**

**Required Date:** 10/06/14    **Req'd Qty:** 1.00

**\*1\***

**Customer:**

**Reference:**

**Approvals:**

**Process Plan:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Tooling:** \_\_\_\_\_

**Date:** \_\_\_\_\_

Run Start

**\*NR1\***

**QC:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**SPC (Y/N):** \_\_\_\_\_

**Date:** \_\_\_\_\_

Stop

**\*NR2\***

**Sequence ID/  
Work Center ID**

**Operation  
Description**

120

Chemical Conversion Coat per QSI005 4.1

**Set Up/  
Run Hours**

**Tool ID**

**Tool #**

**Plan  
Code**

**Accept  
Qty**

**Reject  
Qty**

**Reject  
Number**

**Insp.  
Stamp**

**\*120\***

HandFinish

Hand Finishing

130

QC7-Inspect Chemical Conversion Coat

0.00

**\*130\***

QC

Quality Control

Memo

0.00

*[Handwritten signatures and dates]*

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only 

Work Order: _____	<b>DISPOSITION</b>	<b>AGAINST DEPARTMENT/PROCESS</b>					
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>		
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>		
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>			

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

## FAULT CATEGORY

<b>Landing Gear</b>	<b>General</b>			
Bending	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>
Centre Not Concentric	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>
Cracks	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>
Crimp/Kink/Ripple/Wave	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>
Cuffs	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>
Crushing	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	
Heat Treat	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	
Inspection Strip in Tube	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>		
Marks/Chatter	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>		
Turning Sequence	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>		
Wave/Twist in Tube	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>		

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Item ID: D3391-023

Accept

**\*N900040100\***

Setup

Start

**\*NS1\***

Revision ID:

Item Name: Mid Tube Assembly

Stop

**\*NS2\***Start Date: 9/25/14 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 10/06/14 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals:	Process Plan: _____	Date: _____	Tooling: _____	Date: _____	Run	Start	<b>*NR1*</b>
	QC: _____	Date: _____	SPC (Y/N): _____	Date: _____	Stop		<b>*NR2*</b>

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140 <b>*140*</b> Skidtubes	Skidtubes	0.00							
	Memo	0.00							
	1-Open float bag holes as per dwg 2-C'sink float bag holes as per dwg 3- Prepare tube for welding 4-Bond web in place as per Dwg D3391 & QSI 015. Adhere for 12 hours) A/R Sikaflex exp: <u>15-02-05</u> batch#: <u>130227</u>								
	NOTE:ENSURE WEB IS INSERTED IN AFT END OF TUBE								
150 <b>*150*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O	0.00							
	Memo	0.00							

*8/14-10-22*

*D 8/14-10-23*

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only 

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
			Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

## FAULT CATEGORY

Landing Gear	General			
Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>
Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>
Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>
Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>
Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>
Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	Other <input type="checkbox"/>
Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	
Inspection Strip in Tube <input type="checkbox"/>	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>		
Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>		
Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>		
Wave/Twist in Tube <input type="checkbox"/>	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>		

**Work Order ID 125256**

Tuesday, October 07, 2014 10:39:20 AM

**\*125256\***

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Item ID: D3391-023

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Mid Tube Assembly

Stop

**\*NS2\***

Start Date: 9/25/14 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 10/06/14 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	<b>*NR1*</b>
						Stop	<b>*NR2*</b>
	QC:	Date:	SPC (Y/N):	Date:			

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 <b>*160*</b> Skidtubes	Skidtubes Memo 1-Weld crossbolt spacer as per dwg D3391 & QSI 004 2-grind weld flush	0.00 A/RM130137				1	0	661440-23	
170 <b>*170*</b> QC Quality Control	QC10- Inspect visual per QSI004- ground welds Memo	0.00				D	14-10-28	DAS 9 +89	
180 <b>*180*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00				D	14-10-28	DAS 9 +89	

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only 

Work Order: _____	<b>DISPOSITION</b>			<b>AGAINST DEPARTMENT/PROCESS</b>				
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY									
Landing Gear			General						
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Folio/Program	<input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Pressure/Forced					
<input type="checkbox"/> Centre Not Concentric	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Grain	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Set-up					
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damage/Defect	<input type="checkbox"/> Hardware	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Temperature/Cure					
<input type="checkbox"/> Crimp/Kink/Ripple/Wave	<input type="checkbox"/> Burrs	<input type="checkbox"/> Inspection Incomplete/Unqualified	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Weld					
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Moved	<input type="checkbox"/> Wrong Stock Pulled					
<input type="checkbox"/> Crushing	<input type="checkbox"/> Countersink	<input type="checkbox"/> Misaligned/off center	<input type="checkbox"/> Positioned Wrong	<input type="checkbox"/> Other					
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Power Loss/Surge						
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Drawing	<input type="checkbox"/> Misread							
<input type="checkbox"/> Marks/Chatter	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Off-set							
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Calibration							
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Fit/Function	<input type="checkbox"/> Out of Sequence							

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Item ID:	D3391-023	Accept	<b>*N900040100*</b>	Setup	Start	<b>*NS1*</b>	
Revision ID:						Stop	<b>*NS2*</b>
Item Name:							
Start Date:	9/25/14	Start Qty:	1.00	<b>*1*</b>	Cust Item ID:		
Required Date:	10/06/14	Req'd Qty:	1.00	<b>*1*</b>	Customer:		
Reference:							
Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	<b>*NR1*</b>
	QC:	Date:	SPC (Y/N):	Date:	Stop		<b>*NR2*</b>

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
185 <b>*185*</b> HandFinish	Pressure Wash per QSI005 4.3 AND REALODINE AS PER PAR09-043	0.00							<i>1x 6 100 11/16/14</i>
190 <b>*190*</b> Powdercoat	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum <i>m 129808</i>	0.00							<i>1x 6 14-10-30. DAS 34 9-89</i>
Powder Coating	Memo START TIME: <i>11:25</i> OVEN TEMPERATURE: <i>320°</i> FINISH TIME: <i>11:55</i>	0.00							
200 <b>*200*</b> QC	QC3- Inspect Part Finish Memo	0.00							<i>1x 6 14-10-30. DAS 15 9-89</i>
Quality Control		0.00							

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only 

Work Order: _____	<b>DISPOSITION</b>	<b>AGAINST DEPARTMENT/PROCESS</b>					
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>		
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>		
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>			

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

<b>FAULT CATEGORY</b>									
Landing Gear			General						
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Folio/Program	<input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Pressure/Forced					
<input type="checkbox"/> Centre Not Concentric	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Grain	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Set-up					
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damage/Defect	<input type="checkbox"/> Hardware	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Temperature/Cure					
<input type="checkbox"/> Crimp/Kink/Ripple/Wave	<input type="checkbox"/> Burrs	<input type="checkbox"/> Inspection Incomplete/Unqualified	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Weld					
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Moved	<input type="checkbox"/> Wrong Stock Pulled					
<input type="checkbox"/> Crushing	<input type="checkbox"/> Countersink	<input type="checkbox"/> Misaligned/off center	<input type="checkbox"/> Positioned Wrong	<input type="checkbox"/> Other					
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Power Loss/Surge						
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Drawing	<input type="checkbox"/> Misread							
<input type="checkbox"/> Marks/Chatter	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Off-set							
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Calibration							
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Fit/Function	<input type="checkbox"/> Out of Sequence							

**Work Order ID 125256**

Tuesday, October 07, 2014 10:39:20 AM

**\*125256\***

Page 7

Item ID: D3391-023

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Mid Tube Assembly

Stop

**\*NS2\***

Start Date: 9/25/14 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 10/06/14 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230 <b>*230*</b> HandFinish	HandFinishing	0.00							
Hand Finishing	Memo	0.00							
	1-Install Inserts as per Dwg								
240 <b>*240*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O	0.00							DAS 38 9-89 74-11-4
	Memo	0.00							
250 <b>*250*</b> Packaging Packaging	Identify as per dwg & Stock Location: <u>W10</u>	0.00	0412-742-033 / 3115496						
	Memo	0.00							

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only 

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS				
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

## FAULT CATEGORY

Landing Gear	General			
Bending	Bend			
Centre Not Concentric	BOM/Route			
Cracks	Broken/Damage/Defect			
Crimp/Kink/Ripple/Wave	Burrs			
Cuffs	Contamination			
Crushing	Countersink			
Heat Treat	Cut Too Short			
Inspection Strip in Tube	Drawing			
Marks/Chatter	Drill Holes			
Turning Sequence	Finish			
Wave/Twist in Tube	Fit/Function			
	Folio/Program			
	Grain			
	Hardware			
	Inspection Incomplete/Unqualified			
	Instructions Incomplete/Unclear			
	Misaligned/off center			
	Mislabeled			
	Misread			
	Off-set			
	Out of Calibration			
	Out of Sequence			

**Work Order ID 125256**

Tuesday, October 07, 2014 10:39:20 AM

**\*125256\***

Page 8

Item ID: D3391-023

Accept

**\*N900040100\***

Setup

Start

**\*NS1\***

Revision ID:

Item Name: Mid Tube Assembly

Stop

**\*NS2\***

Start Date: 9/25/14 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 10/06/14 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

260

QC21- Final Inspection - Work Order Release

0.00

**\*260\***

QC

Quality Control

Memo

0.00

10/11/14 [Signature]

10/11/04 [Signature]

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Date:



# WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

## Work Order update only

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
Part No. _____			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
NCR No. _____			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
Suspected Unapproved <input type="checkbox"/>				Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Design <input type="checkbox"/>											
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Handling/Pre <input type="checkbox"/>											
Material <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Offset/Setup <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Transport <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
Landing Gear				General							
<input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				<input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function							
				<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence							
				<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge							
				<input type="checkbox"/> Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled							
				<input type="checkbox"/> Other							

# Picklist Print

Tuesday, October 07, 2014 10:39:19 AM

Page 1

Work Order ID: 125256

\*125256\*  
\*D3391-023\*

Parent Item: D3391-023

Parent Item Name: Mid Tube Assembly

Start Date: 9/25/14

Start Qty: 1.00

Required Date: 10/06/14

Required Qty: 1.00

Comments:

IPP A05.10.20 New Issue KJ/EC  
 IPP B06.02.10 ECN773 dwg rev.D EC  
 IPP C 07.03.20 rev F dwg EC  
 IPP D 07.03.28 re-format EC  
 IPP E 07.10.31 ecn 1053P EC  
 IPP Rev:F ECN 1056 07-11-13 DD verified by: EC  
 IPP Rev:G 08-09-08 new process (ecn 08-510) DD verified by:EC  
 IPP Rev:H 08-09-10 revH as per dwg DD verified by:EC  
 IPP Rev: I 08-11-13 Removed steps per w/o, QC KJ verified by: ec IPP  
 Rev:J add in seq 140 expire date & sikaflex DD 10.02.17 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2500-1-100		Manufactured	No			100	Each	57.0000	1	1		BE14-10-09	**

\*D2500-1-100\*

Skidtube Extrusion

Location	Loc Qty	Loc Code
HALL	57	
82373	8	
86065	49	

D3389-1

\*D3389-1\*

Web

Manufactured No

140 Each 6.0000 1 1

BE14-10-28  
D125135 x1

Location	Loc Qty	Loc Code
LG	6	
115652	6	

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Date:



# WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

## Work Order update only

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework Scrap Use-as-is Suspected Unapproved	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other				
Part No. _____  NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Design											
Doc/Data											
Equip/Tooling											
Handling/Pre											
Material											
Operator											
Offset/Setup											
Process											
Supplier											
Training											
Transport											
Unapproved											
FAULT CATEGORY											
Landing Gear			General								
Bending	Bend	Folio/Program	Outside Dimensions	Pressure/Forced							
Centre Not Concentric	BOM/Route	Grain	Over/Under tolerance	Set-up							
Cracks	Broken/Damage/Defect	Hardware	Part Incorrect	Temperature/Cure							
Crimp/Kink/Ripple/Wave	Burrs	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld							
Cuffs	Contamination	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled							
Crushing	Countersink	Misaligned/off center	Positioned Wrong								
Heat Treat	Cut Too Short	Mislabeled	Power Loss/Surge								
Inspection Strip in Tube	Drawing	Misread									
Marks/Chatter	Drill Holes	Off-set									
Turning Sequence	Finish	Out of Calibration									
Wave/Twist in Tube	Fit/Function	Out of Sequence									

# Picklist Print

Tuesday, October 07, 2014 10:39:20 AM

Page 2

Work Order ID: 125256

\*125256\*  
\*D3391-023\*

Parent Item: D3391-023

Parent Item Name: Mid Tube Assembly

Start Date: 9/25/14

Required Date: 10/06/14

Start Qty: 1.00

Required Qty: 1.00

D3681-1

Manufactured No

160

Each

83.0000

5

5

\*\*

8/14-10-23

\*D3681-1\*

Spacer

	<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
	LG	80	
	123088	40	
	123490	40	5
	LG001	3	
	114884	3	

ALS4-1032-130

AELS4-1032-130 Purchased

No

230

Each

3,693.000

20

20

\*\*

all ucluoz

\*AI S4-1032-130\*

Rivnut

	<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
	ST267	3693	
	M126109	57	
	M128211	48	
	M128649	3588	x20

\*D3591-1 (Bushing) (x2) B115333 all ucluoz

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_

Date: \_\_\_\_\_

Work Order update only 

Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS			
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

Landing Gear	General			
Bending	Bend			
Centre Not Concentric	BOM/Route			
Cracks	Broken/Damage/Defect			
Crimp/Kink/Ripple/Wave	Burrs			
Cuffs	Contamination			
Crushing	Countersink			
Heat Treat	Cut Too Short			
Inspection Strip in Tube	Drawing			
Marks/Chatter	Drill Holes			
Turning Sequence	Finish			
Wave/Twist in Tube	Fit/Function			
	Folio/Program			
	Grain			
	Hardware			
	Inspection Incomplete/Unqualified			
	Instructions Incomplete/Unclear			
	Misaligned/off center			
	Mislabeled			
	Misread			
	Off-set			
	Out of Calibration			
	Out of Sequence			

